

634-011

Dart Aerospace Ltd.

Date: Tuesday, 10/03/2009 10:50:17 AM  
 User: Julie Dawson

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : SKID TUBE ASSEMBLY  
 Job Number : 46384A  
 Estimate Number : 10023  
 P.O. Number :  
 This Issue : 10/03/2009 S.O. No. :  
 Prsht Rev. : NC Drawing Number : D205634041  
 First Issue : / / Type : SKIDTUBES Project Number : N/A  
 Previous Run : 46383A Drawing Revision : D  
 Material :  
 Due Date : 31/03/2009 Qty: 1 Um: Each  
 Written By :  
 Checked & Approved By : JLD 09-03-10  
 Comment : Est Rev:N 02.08.28 FP was QC5 in Step 27; Added QC5 to Step 30 KJ  
 Est Rev: O 06.02.28 Added paperwork EC  
 Est Rev:P 07-07-09 SS Wearplates & Gaskets JLM

## Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 DC DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy D205-634 bluefile &amp; type labels per PPP D205-634-041 CHG002

NA

2.0 D25001190 Ext'n -1 Beam Tube 4"



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description Batch  
 1 D2500-1-190 Skid Tube Extrusion B40/50

pm 09-03-11

3.0 D2596 Web, 205 Skidtube



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description Batch  
 1 D2596 205 Web B-46408

MB 09-03-11 ①

4.0 SKIDTUBES 1 SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1- Inspect mat'l D2500-1-190 for damage

2-Cut D2500-1-190 per Dwg D2580 if necessary Deburr ends

3-Acid etch and Alodine tube per QSI 005 4.1

pm 09-03-11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 10/03/2009 10:50:17 AM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SKID TUBE ASSEMBLY

Job Number: 46384A

Part Number: D205634041

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0 QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

① 09-03-11

6.0 SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Drill pilot holes using drill jig DT 8149(Do not use cutting fluid)

2-Open holes to 0.500" as per Dwg D2580without cutting fluid

3-Countersink holes as per Dwg D2580without cutting fluid

4-Deburr and blow out all chips from inside of tube

5-Bond web in place per QSI 015. Allow 12 Hrs. cure time before cutting

Pick:

Qty	Part Number	Description	Batch
A/R	Sikaflex-291	MA07883	
Sikaflex expire date: 08-07-11			
Start Time: 15:50		Date: 09-03-11	
Fin Time: 8:00		Date: 09-03-12	

pm 09-03-11 ①

MB 09-03-11  
MB 09-03-12

7.0 BENDING

BENDING MACHINE - SKIDTUBES



Comment: BENDING MACHINE

1-Bend as per program D2580.C on CNC Bender and Folio FT009

2-Cut tubes as per Dwg. D2580

MA 09-03-12 ①

8.0 SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Deburr ends

2-Prepare tube for welding, remove alodine as required.

pm 09-03-12 ①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Tuesday, 10/03/2009 10:50:17 AM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SKID TUBE ASSEMBLY

Job Number: 46384A

Part Number: D205634041

Job Number:



Seq. #:

Machine Or Operation:

Description :

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

BE 09-03-13

10.0

D25763

Step (maching detail)



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty

Part Number

Description

Batch

20

D25763

Step

BE 09-03-13

11.0

D2579

Crossbolt Spacer



Comment: Qty.: 20.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick:

Qty

Part Number

Description

Batch

20

D2579

Spacers

BE 09-03-12

12.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

2-Weld step D2576 as per Dwg. D2580 and QSI 004

A/R

Aluminum Rod

BE 09-03-13

3-Prep per QSI 005 and weld crossbolt spacers D2579 as per Dwg. D2580, QSI 004.

For D2579 spacers, weld one side, pass 3/8" drill, weld other side, pass 3/8" drill

A/R

Aluminum Rod

BE 09-03-13

4-Grind welds as per Dwg D2580 Grind flush ridge made from bending

BE 09-03-13

5-Drill holes for wearplates using DT 8217 & DT8937 Open holes to 19/64", adjust stopper not to hit web. Debur

6-Counterbore crossbolt spacers to 7/16" ID x 1.0" deep as per Dwg D2580. Debur holes

7-Drill pilot holes for aft cap using DT 8215 Open holes to 0.208". Debur

8-Drill pilot holes for Tow ring using DT8091, open to .640" and Debur

BE 09-03-16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Tuesday, 10/03/2009 10:50:17 AM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SKID TUBE ASSEMBLY

Job Number: 46384A

Part Number: D205634041

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

QC10

VISUAL INSPECTION OF GROUND WELDS



Comment: VISUAL INSPECTION OF GROUND WELDS

S 09/03/16 (X)

14.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 09/03/16 (X)

15.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Pressure wash as per QSI 005

a.m 09-03-31 (D)

16.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

START TIME:

11:00

OVEN TEMPERATURE:

320°

FINISH TIME:

11:30

umol BR

09/03/31 (X)

17.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

09-04-01 (X)

18.0

D2855

Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Cap

Batch: B 42343

umol BR

09/04/01

19.0

AN35A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Bolt

Batch: m100188

umol BR

09/04/01

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



Date: Tuesday, 10/03/2009 10:50:18 AM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SKID TUBE ASSEMBLY

Job Number: 46384A

Part Number: D205634041

Job Number:



Seq. #:

Machine Or Operation:

Description :

20.0

AN960JD10L

Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Washer

Batch: m109632

cmo/ BR

09/04/01

21.0

ALS71032130

Insert



Comment: Qty.: 50.0000 Each(s)/Unit Total : 50.0000 Each(s)

Insert

Batch: m1086006

cmo/ BR

09/04/01

22.0

AN3C4A

BOLT



Comment: Qty.: 50.0000 Each(s)/Unit Total : 50.0000 Each(s)

BOLT

Batch: m110985

cmo/ BR

09/04/01

23.0

AN960C10L

washer



Comment: Qty.: 50.0000 Each(s)/Unit Total : 50.0000 Each(s)

washer

Batch: m111193

cmo/ BR

09/04/01

24.0

D356613

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: B45717

cmo/ BR

09/04/01

25.0

D35665

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: B46186

cmo/ BR

09/04/01

26.0

D35661

Gasket



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

GASKET

Batch: B46349

cmo/ BR

09/04/01

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Tuesday, 10/03/2009 10:50:18 AM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SKID TUBE ASSEMBLY

Job Number: 46384A

Part Number: D205634041

Job Number:



Seq. #:

Machine Or Operation:

Description :

27.0

D356413

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

WEARSHOE

Batch: B45409 cmp BL 09/04/01

28.0

D356411

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

WEARSHOE

Batch: B45823 cmp BL 09/04/01

29.0

D35649

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

WEARSHOE

Batch: B44659 cmp BL 09/04/01

30.0

D35645

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

WEARSHOE

Batch: B46184 cmp BL 09/04/01

31.0

D25943

O-Ring, 205 Skidtube



Comment: Qty.: 16.0000 Each(s)/Unit Total: 16.0000 Each(s)

O-Ring

Batch: B29908 cmp BL 09/04/01

32.0

D25941

Plug, 205 Skidtube



Comment: Qty.: 16.0000 Each(s)/Unit Total: 16.0000 Each(s)

Plug

Batch: B42221 (x10) B44435 (x6) cmp BL 09/04/01

33.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install inserts & wearplates & Gaskets as per Dwg. D2580. Use a drop of Sikaflex on insert holes before installing wearplates

A/R

Sikaflex-291

m109883 cmp BL 09/04/01

Form: rprocess

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Tuesday, 10/03/2009 10:50:18 AM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SKID TUBE ASSEMBLY

Job Number: 46384A

Part Number: D205634041

Job Number:



Seq. #:

Machine Or Operation:

Description :

Sikaflex expire date: 09/11

2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594-1 plugs as per Dwg D2580

3-Inspect for foreign object per QSI 024

4-Install 2855 Aft Cap as per Dwg D2580 and seal Fwd Step & Aft Cap with Sikaflex. Clean excess adhesive

A/R Sikaflex-291

Sikaflex expire date: 09/11

5-Wing Walk as per Dwg D2580 and QSI 005 4.4

Batch: M 102917

- Fd 09/04/01 (C)

34.0

QC5

INSPECT WORK TO CURRENT STEP



S 09/04/01 (C)



Comment: Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for Foreign objects per QSI 024

35.0

PACKAGING 1

PACKAGING RESOURCE #1



(C)

Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D205-634-041

Location:

PPP Rev:

PPP

46384

9/4/01

SL

36.0

QC21

FINAL INSPECTION/W/O RELEASE



09/04/08 (C)

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF 09-04-07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**DART**

DESIGN #	DRAWN BY RH	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D2580	REV. D SHEET 1 OF 3
DATE 07.02.27		TITLE 205 SKIDTUBE ASSEMBLY	SCALE NTS
A	96.09.16	NEW ISSUE	
B	96.12.02	AS MANUFACTURED	
C	98.08.26	REDRAWN, INCLUDED DEO 9094/9097	
D	07.02.27	CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/9183	

**RELEASED**  
07.06.28 #

QTY -041	QTY -045	Part Number	Description
X		D2580-041	SKIDTUBE ASSEMBLY
	X	D2580-045	SKIDTUBE ASSEMBLY
1	1	D2500-1-190	EXTRUSION
1	1	D2576-3	STEP
20	24	D2579	CROSS BOLT SPACER
16	16	D2594-1	PLUG
16	16	D2594-3	O-RING
1	1	D2596	205 WEB
1	1	D2855	AFT CAP
1	1	D3564-5	WEARSHOE
1	1	D3564-9	WEARSHOE
1	1	D3564-11	WEARSHOE
1	1	D3564-13	WEARSHOE
2	2	D3566-1	GASKET
1	1	D3566-5	GASKET
1	1	D3566-13	GASKET
50	50	ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or AELS-1032-130	INSERT
50	50	AN3C4A	BOLT
2	2	AN3-5A	BOLT
50	50	AN960C10L	WASHER
2	2	AN960JD10L	WASHER

**GENERAL NOTES:**

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) ALL DIMENSIONS ARE IN INCHES
- 3) INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 4) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 5) USE DART DRILL TEMPLATE TD2577-205 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTION D-D (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND AN960C10L WASHERS WITH SIKAFLEX-241/-291.
- 6) WELDING TO BE DONE PER DART QSI 004.
- 7) FINISH:  
SEE NOTES ON  
PAGE 2 FOR D2580-041 AND  
PAGE 3 FOR D2580-045
- 8) INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES).

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 110384A

**Copyright © 1996 by DART AEROSPACE LTD**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DETAIL B**  
SCALE 5:24

GRIND FLUSH (4 PLACES)

GRIND FLUSH

D2576-3 STEP

GRIND FLUSH

LOCATION RIDGE ON UNDERSIDE OF D2576

1/4"

Technical drawing of a propeller hub cross-section. The drawing shows a circular hub with a central bore and a rectangular cutout. Assembly callouts include:

- #0.208 DRILL PRIOR TO D2855 CAP INSTALLATION (2 PLACES)
- AN3-5A BOLT (1)
- AN960J10L WASHER (1)
- (2 PLACES)
- D2855 CAP
- SEAL WITH SIKAFLEX-241/-291

Partial text from the reverse side of the page is visible at the bottom:

SHO...  
RETR...  
ENGIN...  
NCONTR...  
SUBJECT T...  
WITH...  
WOP...

D2579 SPACER

D2596 WEB (REF)

ALS7-1032-130 (REF)  
(TYP 50 PLACES)

AFTER DRILLING AND BENDING ASSEMBLY  
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:

1. CHAMFER HOLE 0.050 x 45°
2. INSERT D2579 SPACER (20 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. C'BORE D2579 SPACER TO Ø0.437 x 1.00 DEEP

i) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB  
POWDER COAT ASSEMBLY GLOSS WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4

[illegible][illegible]

0.5 1.5 1.5 D P P P P P P P

BLACK ANTI-SKID TO 0.5 ABOVE LOCATION RIDGE

BLACK ANTI-SKID TOP OF STEP TO 0.5 ABOVE BOTTOM EDGE

WELD AS PER DETAIL B

8

1.5 1.5 1.5

REFER TO DETAIL C





D3566-1 D3566-5 D3566-1 D3566-13

D3564-11 D3564-5 D3564-9 D3564-13

AN3C4A BOLT (1)  
AN960C10L WASHER (1)  
(50 PLACES)

DESIGN J DRAWN BY

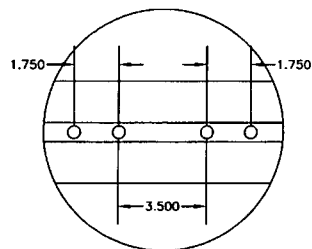
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL  
AND IS SUPPLIED ON THE EXPRESS CONDITION  
THAT IT IS NOT TO BE USED FOR ANY PURPOSE  
OR COPIED OR COMMUNICATED TO ANY OTHER  
PERSON WITHOUT WRITTEN PERMISSION FROM  
DART AEROSPACE LTD.

DESIGN		DRAWN BY	
CHECKED		APPROVED	
DATE			
07.02.27			

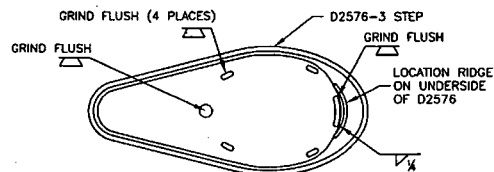
 <b>DART AEROSPACE LTD.</b> HURKESBURY, ONTARIO, CANADA	
DRAWING NO.	REV. D
D2580	SHEET 2 OF 3
TITLE	SCALE
205 SKIDTUBE ASSEMBLY	1:24



**DETAIL E**  
SCALE 5:24

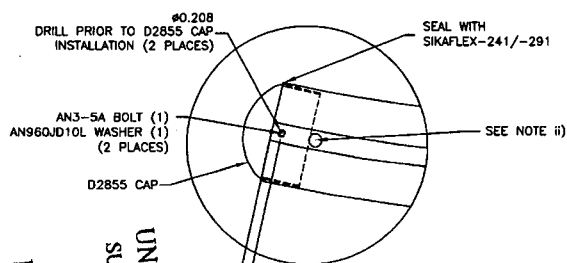


**DETAIL F**  
SCALE 5:24

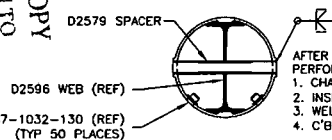


**RELEASED**  
07.06.28

**DETAIL G**  
SCALE 5:24

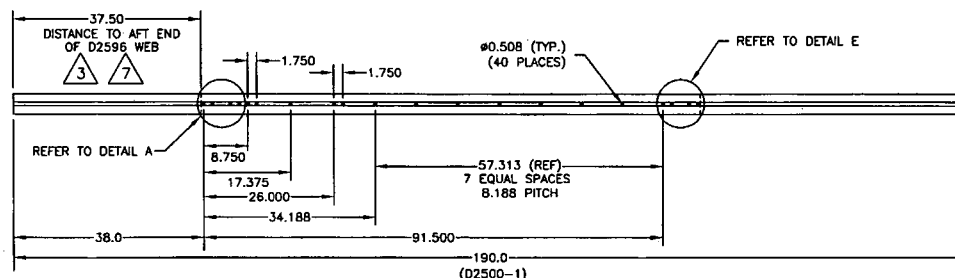


**SECTION H-H**  
SCALE 5:24

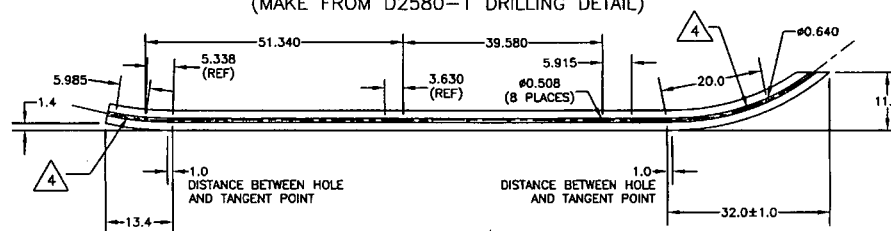


AFTER DRILLING AND BENDING ASSEMBLY PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:  
1. CHAMFER HOLE 0.050 X 45°  
2. INSERT D2579 SPACER (20 PLACES)  
3. WELD INTO PLACE AND GRIND FLUSH  
4. C'BORE D2579 SPACER TO Ø0.437 X 1.00 DEEP

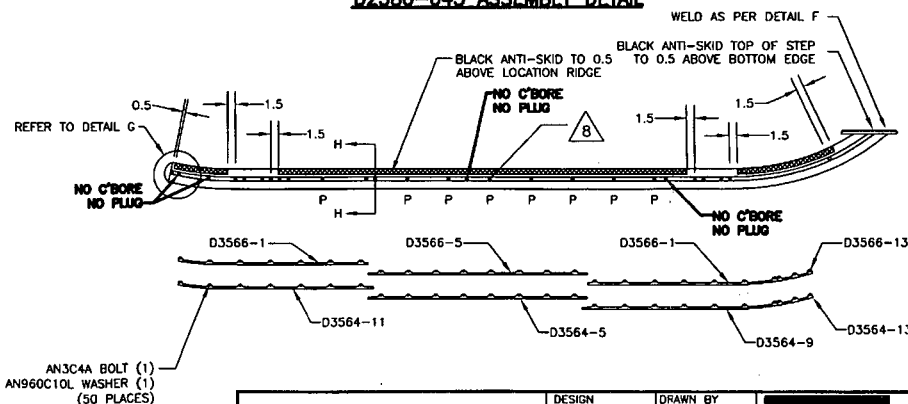
**D2580-1 DRILLING DETAIL**



**D2580-5 BENDING AND CUTTING DETAIL**  
(MAKE FROM D2580-1 DRILLING DETAIL)



**D2580-045 ASSEMBLY DETAIL**



NO WORK ORDER  
WITHOUT NOTICE  
UNCONTROLLED COPY  
ENGINEERING  
RETURN TO  
SHOP COPY  
0.40

**D2580-045 NOTES**

- FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB  
POWDER COAT ENTIRE ASSEMBLY GREEN (REF. 4.3.5.8) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4
- IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2855 AFT CAP TO PREVENT INTERFERENCE WITH THE SPACER AT THIS LOCATION

COPYRIGHT © 1996 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DESIGN P.H.	DRAWN BY P.H.	<b>DART</b>	DART AEROSPACE LTD. HAWKESBURY, ONTARIO, CANADA
CHECKED H	APPROVED H	DRAWING NO. D2580	REV. D SHEET 3 OF 3
DATE 07.02.27	TITLE 205 SKIDTUBE ASSEMBLY	SCALE 1:24	

NO. 187

**AWS D17.1.2001  
QUALIFICATION TEST RECORD**

Name: Barclay Elliot  
Job number: 644417  
Part number: A205-634-041  
Description: 205 Skid tube  
Welding Process: Tig[☒] Mig[ ]  
Base material: Alum  
Current: AC[☒] DC[ ]

**TEST REQUIREMENTS AND RESULTS**

Visual: pass[☒] fail[ ]  
Penetration: pass[☒] fail[ ]

**UNACCEPTABLE**

Cracks: pass[☒] fail[ ]  
Undercut: pass[☒] fail[ ]  
Pin holes: pass[☒] fail[ ]  
Overlap (cold lap): pass[☒] fail[ ]  
Porosity (surface): pass[☒] fail[ ]  
Coloration: pass[☒] fail[ ]

Qualifier Lawrence Date of Test Coupon 09/01/13

Welder Barclay Elliot Date of Test Coupon 09/01/13

The above named individual is qualified in accordance with AWS D17.1.2001 to weld